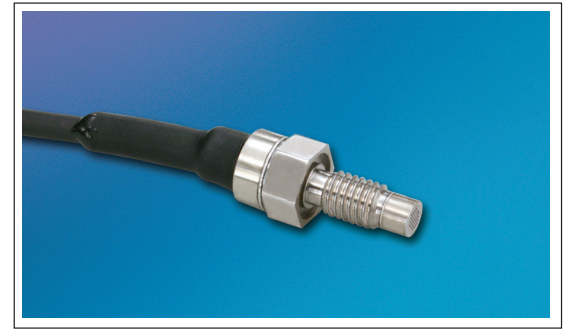




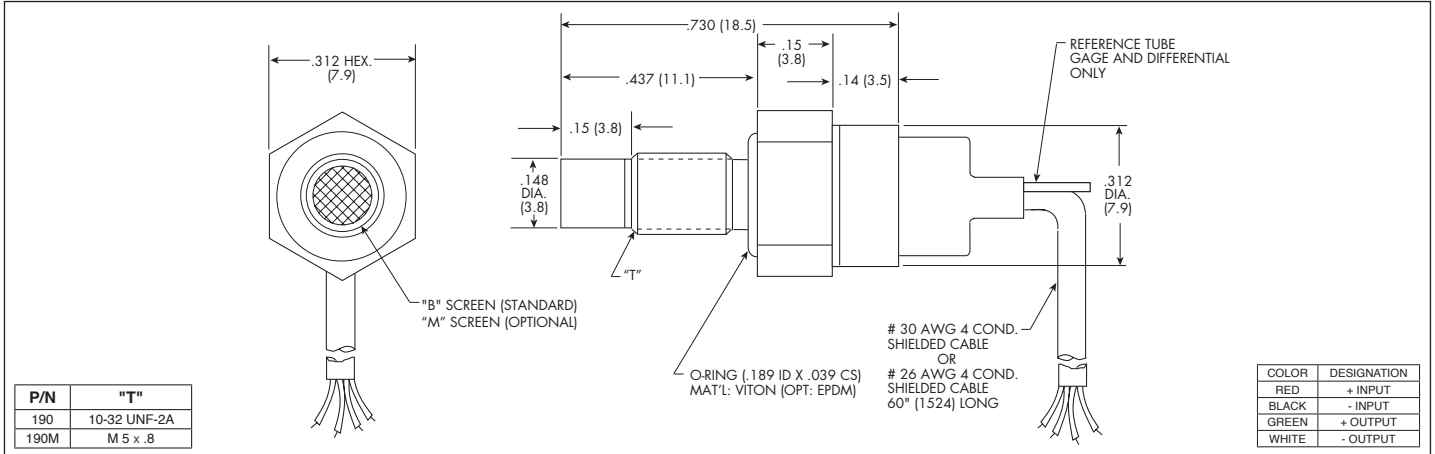
**RUGGEDIZED AUTOMOTIVE
PRESSURE TRANSDUCER
XTL-123A-190 (M) SERIES**

- Easy Installation
- High Natural Frequency
- Patented Leadless Technology **VIS**[®]
- 10-32 UNF or M 5 x .8 Thread
- Wide Temperature Range
- Compatible With Most Automotive Fluids



Part performance not guaranteed if used in water.

Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the XTL-123A-190 transducer.



| | | | | | | | | | | | |
|----------------------------|---|---|----------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|----------------------|--|
| INPUT | Pressure Range | 1.0 15 | 1.7 25 | 3.5 50 | 7 100 | 17 250 | 35 500 | 70 1000 | 100 1500 | 210 BAR 3000 PSI | |
| | Operational Mode | Absolute, Sealed Gage, Gage, Differential | | | | | Absolute, Sealed Gage | | | | |
| | Over Pressure | 2 Times Rated Pressure to 500 PSI (35 BAR), 1.5 Times Rated Pressure Above 500 PSI (35 BAR) | | | | | | | | | |
| | Burst Pressure | 3 Times Rated Pressure to a Maximum of 4500 PSI (315 BAR) | | | | | | | | | |
| | Pressure Media | All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory) | | | | | | | | | |
| | Rated Electrical Excitation | 10 VDC | | | | | | | | | |
| | Maximum Electrical Excitation | 12 VDC | | | | | | | | | |
| | Input Impedance | 1000 Ohms (Min.), 5000 Ohms (Max.) | | | | | | | | | |
| OUTPUT | Output Impedance | 2000 Ohms (Max.) | | | | | | | | | |
| | Full Scale Output (FSO) | 100 mV ± 10 mV | | | | | | | | | |
| | Residual Unbalance | ± 5mV (Typ.) | | | | | | | | | |
| | Combined Non-Linearity, Hysteresis and Repeatability | ± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.) | | | | | | | | | |
| | Resolution | Infinitesimal | | | | | | | | | |
| | Natural Frequency of Sensor Without Screen (KHz) (Typ.) | Greater Than 175 KHz | | | | | | | | | |
| | Acceleration Sensitivity % FS/g Perpendicular | 6.5x10 ⁻⁴ | 5.0x10 ⁻⁴ | 3.0x10 ⁻⁴ | 1.5x10 ⁻⁴ | 1.0x10 ⁻⁴ | 6.0x10 ⁻⁵ | 4.5x10 ⁻⁵ | 3.5x10 ⁻⁵ | 2.0x10 ⁻⁵ | |
| ENVIRONMENTAL | Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | | | | | | |
| | Operating Temperature Range | -65°F to +390°F (-55°C to +200°C) | | | | | | | | | |
| | Compensated Temperature Range | -40°F to +350°F (-40°C to +175°C) | | | | | | | | | |
| | Thermal Zero Shift | ± 1% FS/100°F (Typ.) | | | | | | | | | |
| | Thermal Sensitivity Shift | ± 1% /100°F (Typ.) | | | | | | | | | |
| PHYSICAL | Linear Vibration | 20g Peak, Sine 10 to 2000 Hz | | | | | | | | | |
| | Mechanical Shock | 20g Half Sine Wave 11 msec. Duration | | | | | | | | | |
| | Electrical Connection | 4 Conductor 30 AWG Shielded Cable or 4 Conductor 26 AWG Shielded Cable 60" Long | | | | | | | | | |
| | Weight | 5 Grams (Nom.) Excluding Cable | | | | | | | | | |
| Pressure Sensing Principle | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology | | | | | | | | | | |
| Mounting Torque | 15 Inch-Pounds | | | | | | | | | | |

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (O) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved. Kulite miniature pressure transducers are intended for use in test and research and development programs and are not necessarily designed to be used in production applications. For products designed to be used in production programs, please consult the factory.